



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,657	06/13/2007	Peter Jonathan Bentley	020884-000014	2391

24239 7590 11/28/2011
MOORE & VAN ALLEN PLLC
P.O. BOX 13706
Research Triangle Park, NC 27709

EXAMINER

ROBINSON, CHANCEITY N

ART UNIT	PAPER NUMBER
----------	--------------

1722

MAIL DATE	DELIVERY MODE
-----------	---------------

11/28/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Art Unit: 1722



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/599,657

Filing Date: June 13, 2007

Appellant(s): BENTLEY, PETER and NGUYEN, MY

Tristan A Fuierer
For Appellant

EXAMINER'S ANSWER

Art Unit: 1722

This is in response to the appeal brief filed August 18, 2011 appealing from the Office action mailed December 22, 2010.

(1) Real party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

Examiner is not aware of any related proceedings.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is not correct. The summary is reference to the specification of U.S. Patent Application No. 11/954,344, which is not related to Appellant's application of record.

(6) Grounds of Rejection to be reviewed on Appeal

The appellant's statement of the grounds of rejection in the brief is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

<u>Number</u>	<u>Name</u>	<u>Date</u>
US 6,177,182	Nguyen, My	01-2001
WO 02/11984	Bennett et al.	02-2002
US 6,939,663	Tao et al.	07-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. Claims 1-11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen (US 6,177,182 B1) in view of Bennett et al. (WO 02/11984 A1).

Regarding claims 1-4, 8 and 10-11, Nguyen discloses a thermally reactive infrared absorption polymer comprising an infrared absorption chromophoric moiety comprising derivatives including indole cyanine dye and benz[e]-indole cyanine dye, which is bonded to the backbone of an alkali-soluble phenolic resin. See column 3, line 40- column 5, line 14. Further, Nguyen discloses indole cyanine dye such as

Art Unit: 1722

ADS810PO and benz[e]-indole cyanine dye such as ADS805PO, which meets the limitations of the instant claim of salts of indole cyanine dye and benz[e]-indole cyanine dye. (See examples 5 and 14). Nguyen discloses a heat sensitive positive working lithographic printing plate precursor comprising a substrate and a layer coated thereon, wherein the layer comprises the near infrared absorption polymer. See example 18 and claim 4. Also, Nguyen discloses a process of manufacture of a heat sensitive positive working lithographic printing plate precursor, said method comprising: a) imagewise exposing the printing plate precursor with a near-infrared laser emitting at between 780 and 850 nm (example 16); and b) developing the precursor in a developing solution to remove the exposed areas. See reference claims 11-12 and examples 23-24. Also, Nguyen discloses the drying the coated substrate coated at 80 °C to give the plate precursor. See example 17.

Nguyen does not disclose the infrared chromophoric moiety is an indole cyanine dye combined with a benz[e]-indole cyanine dye. However, Bennett et al. disclose a near infrared absorption polymer (abstract and page 15, lines 1-31) comprising more than cyanine dyes (infra-red radiation absorbing compounds, page 17, lines 1- page 18, line 5) that are covalently bonded to the polymer (page 9, lines 2-3). Bennett et al. teach that the infrared radiation absorbing compounds aids in providing improvement to sensitivity of the coating and its mechanical robustness. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the near infrared absorption polymer of Nguyen to include one indole cyanine dye and also a

Art Unit: 1722

benz[e]-indole cyanine dye because Bennett et al. teach the infrared radiation absorbing compounds aid in providing improvement to sensitivity of the coating.

Regarding claims 5-6 and 13, Nguyen does not explicitly disclose the number ratio of indole cyanine dye to benz[e]-indole cyanine dye is comprised in the range of 1:1 to 1:5. However, Nguyen recognizes that a mixture of two different cyanine dyes can be combined at different weight ratios. See example 16. Further, a person skilled in art would readily identify the number (molar) ratio of the cyanine dyes presented in the infrared absorption polymer as too large or too small would affect the stability of the coating substrate of the printing plate. The number ratio is therefore optimizable. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify/optimize the cyanine dyes to optimize ratio to acquire effective stability. Discovery of optimum value of result effective variable in known process is ordinarily within skill of art. *In re Boesch*, CCPA 1980, 617 F.2d 272, 205 USPQ215.

Regarding claims 7 and 14, Nguyen does not explicitly disclose the number ratio of the total pendent IR chromophoric moieties relative to the parent alkali-soluble resin is comprised in the range of 1:30 to 1:5 or 1:50 to 1:3. However, a person skilled in art would identify the number ratio of the total pendent IR chromophoric moieties relative to the parent alkali-soluble resin is too large or too small would affect the stability of the coating substrate of the printing plate. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify/optimize the total pendent IR chromophoric moieties relative to the parent alkali-soluble resin to optimize the amounts to acquire effective stability. Discovery of optimum value of result effective

Art Unit: 1722

variable in known process is ordinarily within skill of art. *In re Boesch*, CCPA 1980, 617 F.2d 272, 205 USPQ215.

Regarding claim 9, Nguyen does not explicitly disclose a positive printing plate precursor, wherein the dry coat weight of the coating layer comprising the near infrared absorption polymer is in the range 1.4-1.9 g/m². However, Nguyen discloses a dry coating weight of 2.0 g/m². Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to recognize that the dry coat weight of the coating layer is 2.0 g/m² (reference) and 1.9 g/m² (instant application) are closely related and therefore would be expected to perform in the same manner. The same results of the coating layer having a dry coat weight of 2.0 g/m² as would be expected from the coating layer having a dry coat weight of 1.9 g/m². *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (citing *In re Petering*, 301 F.2d 676, 682, 133 USPQ 275, 280 (CCPA 1962)) (MPEP 2131.03).

2. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen (US 6,177,182 B1) in view of Bennett et al. (WO 02/11984 A1) as applied to claims 1-11 and 13-15 are above, and further in view of Tao et al. (US 6,939,663 A1).

Regarding claim 12, Nguyen does not disclose the resin is a novolak resin. However, Tao et al. disclose a method for forming a positive working lithographic printing plate comprising a layer of an imageable coating over a substrate, wherein the imageable coating composition comprises of a novolak resin. See column 5, lines 36-52. Therefore, it would have been obvious to one of ordinary skill in the art to modify the resin of Nguyen as a novolak resin because Tao et

(10) Response to Argument

1. Appellant does not agree that Bennett cures the deficiencies of Nguyen because the cyanine dyes of Bennett are not taught to be covalently bonded to the polymer. Moreover, neither Nguyen nor Bennett teach or suggest the covalent bonding of at least two different pendant infra-red chromophoric moieties wherein at least one of the pendant infra-red chromophoric moieties is an indole cyanine dye and the other of which is a benz[e]-indole cyanine dye.

Examiner disagrees with the Appellant that Bennett does not cure the deficiencies of Nguyen. Nguyen explicitly discloses a thermally reactive infrared absorption polymer comprising an infrared absorption chromophoric moiety comprising derivatives including indole cyanine dye (ADS810PO) and benz[e]-indole cyanine dye (ADS805PO), which is bonded to the backbone of an alkali-soluble phenolic resin. See column 3, line 40- column 5, line 14 and examples 5 and 14. However, Nguyen does not teach that dyes are covalently bonded to the resin. Nevertheless, Bennett explicitly discloses that it is well-known in the art that cyanine dyes can be covalently bonded to a polymer (resin; page 5, lines 11-14 & 24-28 and page 16, lines 20-23).

2. Appellant argues that the Office is misinterpreting Bennett and arbitrarily piecing teachings together that are contrary to Bennett as a whole in an attempt to establish a prima facie case of obviousness.

Examiner respectfully disagrees with that the Office is misinterpreting Bennett and arbitrarily piecing teachings together that are contrary to Bennett as whole. It is noteworthy that Appellant has only provided arguments against the Bennett's reference,

Art Unit: 1722

but Appellant has failed to provide any arguments or remarks with regards to the Nguyen's reference. In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Further, Bennett teaches a dye may be employed as a radiation absorbing compound and as a modifying means (page 16, lines 21-23). These dyes are cyanine dyes (page 17, lines 4-9). Bennett explicitly teaches a composition for a positive-working printing precursor including a hydroxyl group-containing polymer and a modifying means (page 5, lines 11-14). The modifying means may be covalently bonded to the hydroxyl group-containing polymer (page 5, lines 24-28). Therefore, the cyanine dyes may be covalently bonded to the hydroxyl group-containing polymer.

3. Appellant further argues that Bennett relates to a coating composition including a hydroxyl group-containing polymer and optional components including modifying means and additional radiation absorbing compounds. Importantly, with regards to the modifying means, Bennett recites some modifying means will be covalently bonded to the hydroxyl group-containing polymers, while other will not be covalently bonded to the hydroxyl group-containing polymer. Bennett initially discloses the modifying means not covalently bonded to the polymer, whereby the modifying means not covalently bonded to the polymer are referred to as "reversible insolubiliser compounds". It can be seen

Art Unit: 1722

that cyanine dyes are listed as reversible insolubilizer compounds (i.e., not covalently bonded).

Examiner disagrees. Bennett teaches a dye may be employed as a radiation absorbing compound and as a modifying means (page 16, lines 21-23). These dyes are cyanine dyes (page 17, lines 4-9). Bennett explicitly teaches a composition for a positive-working printing precursor including a hydroxyl group-containing polymer and a modifying means (page 5, lines 11-14). The modifying means may be covalently bonded to the hydroxyl group-containing polymer (page 5, lines 24-28). Therefore, the cyanine dyes may be covalently bonded to the hydroxyl group-containing polymer.

4. Appellant argues the compounds in Bennett that are covalently bonded to the polymer have a reversible insolubilization effect and include the Q functional groups and/or diazide moieties. The compounds in Bennett that are not covalently bonded are also termed "reversible insolubiliser compounds" and include nitrogen-containing heterocyclic compounds.

Examiner disagrees. The compounds listed on page 7, line 23 - page 9, line 6 of Bennett which includes the Q functional groups and/or diazide moieties are only the preferred compounds that are covalently bonded. Bennett explicitly discloses a preferred composition for a positive-working printing plate includes modifying means effective to alter the dissolution rate of the composition in a developer, in unheated regions, in heated regions, or both in comparison with a corresponding composition not having such modifying means. The modifying means may be covalently bonded to the hydroxyl group-containing polymer. See page 5, lines 11-14 and lines 24-28. The

Art Unit: 1722

polymer that the infrared chromophoric moiety is covalently bonded to is the hydroxyl group-containing polymer. Many dyes have a marked effect on the dissolution rate of the unheated coating in the developer, typically making it much more developer resistant. Thus a dye may be employed as a radiation absorbing compound and as a modifying means in certain coatings of the invention. See page 16, lines 22-23. The invention may employ one or more radiation absorbing compounds and one or more reversible insolubilizer compounds. Certain compounds are available which perform both functions. Notable among these are the cyanine dyes, which are preferred herein as radiation absorbing compounds and/or reversible insolubilizer compounds. See page 19, lines 1-5. Examiner agrees with the appellant that functional groups Q and/or diazide moieties are covalently bonded to the hydroxy group; however, these functional groups and/or diazide moieties are reversible insolubilizer compounds. See pages 6, line 6 – page 4, line 11. The examiner notes the cyanine dyes of Bennett can either function as an absorber compound and/or a reversible insoluble compound. Therefore, the cyanine dye can be covalently bonded to the hydroxyl group-containing polymer as claimed by claim 1 of the instant application.

5. Appellant argues that radiation absorbing compounds are either present in a separate layer of admixed in the composition. The dyes (radiation absorbing compounds), when present, are dissolved in the composition (unless provided as a separate layer of a coating). No covalently bonding of the dyes to the hydroxyl group-containing polymer will occur.

Examiner disagrees. Bennett teaches a dye may be employed as a radiation absorbing compound and as a modifying means (page 16, lines 21-23). These dyes are cyanine dyes (page 17, lines 4-9). Bennett explicitly teaches a composition for a positive-working printing precursor including a hydroxyl group-containing polymer and a modifying means (page 5, lines 11-14). The modifying means may be covalently bonded to the hydroxyl group-containing polymer (page 5, lines 24-28). Therefore, the cyanine dyes may be covalently bonded to the hydroxyl group-containing polymer.

6. Appellant argues that Bennett does not teach that the functional groups and/or diazide moieties that are covalently bonded to the polymer are reversible insolubilizer compounds. The Office's attention is drawn to the fact that the modifying means that are covalently bonded have a reversible insolubilization effect- they are not reversible insolubilization compounds per se. The functional groups and/or diazide moieties that are covalently bonded to the hydroxyl group are not reversible insolubilizer compounds per se, but rather have a reversible insolubilization effect.

Examiner disagrees. Bennett teaches a dye may be employed as a radiation absorbing compound and as a modifying means (page 16, lines 21-23). These dyes are cyanine dyes (page 17, lines 4-9). Bennett explicitly teaches a composition for a positive-working printing precursor including a hydroxyl group-containing polymer and a modifying means (page 5, lines 11-14). The modifying means may be covalently bonded to the hydroxyl group-containing polymer (page 5, lines 24-28). Therefore, the cyanine dyes may be covalently bonded to the hydroxyl group-containing polymer.

7. Appellant argues Bennett discloses that the “radiation absorbing compounds” are either in a separate layer or alternatively, admixed with the composition including the hydroxyl group-containing polymer. In other words, a radiation absorbing compound is not covalently bonded to the hydroxyl group. Further, as discussed at length hereinabove, the reversible insolubiliser compounds are not covalently bonded to the hydroxyl group-containing polymer either.

Examiner disagrees. Bennett teaches a dye may be employed as a radiation absorbing compound and as a modifying means (page 16, lines 21-23). These dyes are cyanine dyes (page 17, lines 4-9). Bennett explicitly teaches a composition for a positive-working printing precursor including a hydroxyl group-containing polymer and a modifying means (page 5, lines 11-14). The modifying means may be covalently bonded to the hydroxyl group-containing polymer (page 5, lines 24-28). Therefore, the cyanine dyes may be covalently bonded to the hydroxyl group-containing polymer.

8. Appellant argues Bennett does not teach the reversible insolubiliser compounds and/or radiation absorbing compounds are covalently bonded to the polymer. Only the Q moieties and the diazide moieties can be covalently bonded to the polymer, neither of which includes cyanine dyes. Since Bennett does not teach that the reversible insolubilization compounds can be covalently bonded to the polymer, the Examiner has failed to establish a prima facie case of obviousness.

Bennett is only added to teach an infrared chromophoric moiety can be covalently bonded to a polymer. Bennett explicitly discloses a preferred composition for a positive-working printing plate includes modifying means effective to alter the

Art Unit: 1722

dissolution rate of the composition in a developer, in unheated regions, in heated regions, or both in comparison with a corresponding composition not having such modifying means. The modifying means may be covalently bonded to the hydroxyl group-containing polymer. See page 5, lines 11-14 and lines 24-28. The polymer that the infrared chromophoric moiety is covalently bonded to is the hydroxyl group-containing polymer. Many dyes have a marked effect on the dissolution rate of the unheated coating in the developer, typically making it much more developer resistant. Thus a dye may be employed as a radiation absorbing compound and as a modifying means in certain coatings of the invention. See page 16, lines 22-23. The invention may employ one or more radiation absorbing compounds and one or more reversible insolubilizer compounds. Certain compounds are available which perform both functions. Notable among these are the cyanine dyes, which are preferred herein as radiation absorbing compounds and/or reversible insolubilizer compounds. See page 19, lines 1-5. Examiner agrees with the appellant that functional groups Q and/or diazide moieties are covalently bonded to the hydroxy group; however, these functional groups and/or diazide moieties are reversible insolubilizer compounds. See pages 6, line 6 – page 4, line 11. The examiner notes the cyanine dyes of Bennett can either function as an absorber compound and/or a reversible insoluble compound. Therefore, the cyanine dye can be covalently bonded to the hydroxyl group-containing polymer as claimed by claim 1 of the instant application.

9. Appellant argues even if Bennett were to teach that cyanine compounds can be covalently bonded to the polymer (which it does not), Bennett does not cure the

Art Unit: 1722

deficiencies of Nguyen. Notably, with regards to the radiation absorbing compounds, appellants reiterate that Bennett prefaces the enumeration of radiation absorbing compound by reciting that they are present in a separate layer or incorporated by admixture. Further, since "cyanine" is a generic synthetic dye family comprising three different sub-genuses and hence a laser number of possible species, there are much more than a finite number of possible combinations of radiation absorbing compounds in Bennett.

Examiner disagrees. Bennett has not been added to teach a sub-genuses or species of a cyanine dye, which includes an indole cyanine dye and a benz[e]-indole cyanine dye as argued by the appellant. Bennett is only added to teach that it is well-known in the art at the time of the invention that an infrared chromophoric moiety can be covalently bonded to a polymer. Nguyen et al. explicitly disclose a thermally reactive infrared absorption polymer comprising an infrared absorption chromophoric moiety comprising derivatives including indole cyanine dye and benz[e]-indole cyanine dye, which is bonded to the backbone of an alkali-soluble phenolic resin. See column 3, line 40- column 5, line 14. Further, Nguyen discloses indole cyanine dye such as ADS810PO and benz[e]-indole cyanine dye such as ADS805PO, which meets the limitations of the instant claim of salts of indole cyanine dye and benz[e]-indole cyanine dye. (See examples 5 and 14).

10. Appellant argues that there is no reason why the skilled artisan considering Bennett would recognize that the attachment of both an indole cyanine dye and a benz[e]-indole cyanine dye to a polymer would result in a more stabilized precursor.

Art Unit: 1722

Appellants surprisingly discovered that the precursor was more stabilized when both an indole cyanine dye and benz[e]-indole cyanine dyes were attached to a polymer.

Examiner disagrees. There is no mention of a precursor or stabilization of a precursor recited in the appellant's independent claim. The claim is merely drawn to a near infrared absorption polymer. Bennett has not been added to recognize that the attachment of both an indole cyanine dye and a benz[e]-indole cyanine dye to a polymer would result in a more stabilized precursor as argued by the appellant. Bennett is only added to teach that it is well-known in the art at the time of the invention that an infrared chromophoric moiety can be covalently bonded to a polymer.

11. Appellant argues Bennett teaches away from appellant's claimed invention. Bennett teaches that absorbing dyes are narrow band absorbers and have to be selected having regard to the wavelength of the radiator which is used for imaging. Therefore, the addition of indole cyanine dyes to a composition already containing benz[e]indole cyanine dyes would not be expected to improve the sensitivity of the precursor when the laser emits for examples at a wavelength of 830 nm since one of the dyes would not be absorbing. In fact, it would be expected by a person of ordinary skill in the art, to have the opposite effect because, as is known in the art and as taught by Bennett, cyanine dyes can also act as "reverse insolubilizer compounds" and the addition of an indole cyanine dye not absorbing, or not absorbing significantly, at the wavelength of emission of the laser would mainly act to decrease the sensitivity of the precursor.

Examiner disagrees that Bennett teaches away from appellant's claimed invention. Bennett is only added to teach that it is well-known in the art at the time of the invention that an infrared chromophoric moiety can be covalently bonded to a polymer. The modifying means may be covalently bonded to the hydroxyl group-containing polymer. See page 5, lines 11-14 and lines 24-28. The polymer that the infrared chromophoric moiety is covalently bonded to is the hydroxyl group-containing polymer. Many dyes have a marked effect on the dissolution rate of the unheated coating in the developer, typically making it much more developer resistant. Thus a dye may be employed as a radiation absorbing compound and as a modifying means in certain coatings of the invention. See page 16, lines 22-23. The invention may employ one or more radiation absorbing compounds and one or more reversible insolubilizer compounds. Certain compounds are available which perform both functions. Notable among these are the cyanine dyes, which are preferred herein as radiation absorbing compounds and/or reversible insolubilizer compounds. See page 19, lines 1-5. The cyanine dyes of Bennett can either function as an absorber compound and/or a reversible insoluble compound. Therefore, the cyanine dye can be covalently bonded to the hydroxyl group-containing polymer as in instant claim 1. Bennett teaches that infrared absorbing compounds aids in providing improvement to sensitivity of the coating and its mechanical robustness.

Further, Bennett explicitly teaches that the precursor is imagewise exposed using a laser having a wavelength between 600 nm and 1100 nm (page 15, lines 9-11). Since, it is well-known in the art that indole cyanine dyes absorb in the range 750-790 nm and

Art Unit: 1722

benz[e]indole cyanine dyes absorb in the range 800-850 nm, then both of the dyes would absorb significantly during the imagewise exposure step of Bennett using a laser having a wavelength between 600 nm and 1100 nm.

12. Appellant argues any conclusion that Bennett cures the deficiencies of Nguyen and together they teach the specific pendent attachment of an indole cyanine dye and benz[e]-indole cyanine dye to a polymer amounts to hindsight reconstruction which legally impermissible. Only with hindsight and knowledge of the invention can someone select isolated and unrelated embodiments of these references and combine them to arrive at something close to the claimed invention.

Examiner disagrees. In response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the appellant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Examiner disagrees that Bennett teaches away from appellant's claimed invention. Bennett is only added to teach that it is well-known in the art at the time of the invention that an infrared chromophoric moiety can be covalently bonded to a polymer. The modifying means may be covalently bonded to the hydroxyl group-containing polymer. See page 5, lines 11-14 and lines 24-28. The polymer that the infrared

Art Unit: 1722

chromophoric moiety is covalently bonded to the hydroxyl group-containing polymer. Many dyes have a marked effect on the dissolution rate of the unheated coating in the developer, typically making it much more developer resistant. Thus a dye may be employed as a radiation absorbing compound and as a modifying means in certain coatings of the invention. See page 16, lines 22-23. The invention may employ one or more radiation absorbing compounds and one or more reversible insolubilizer compounds. Certain compounds are available which perform both functions. Notable among these are the cyanine dyes, which are preferred herein as radiation absorbing compounds and/or reversible insolubilizer compounds. See page 19, lines 1-5. The cyanine dyes of Bennett can either function as an absorber compound and/or a reversible insoluble compound. Therefore, the cyanine dye can be covalently bonded to the hydroxyl group-containing polymer as claimed by claim 1 of the instant application. Bennett teaches that infrared absorbing compounds aids in providing improvement to sensitivity of the coating and its mechanical robustness.

13. Appellant argues Tao does not motivate, teach, or suggest a near infrared absorption polymer comprising at least two different pendent infra-red chromophoric moieties covalently bonded to the backbone of an alkali-soluble resin, wherein at least one of the pendent infra-red chromophoric moieties is an indole cyanine dye and the other of which is a benz[e]-indole cyanine dye. The plate precursors of Tao are of a totally different technology to either Bennett or the present application. Accordingly, there is no reason for one skilled in the art considering the three cited references to go

Art Unit: 1722

in the direction of appellants' invention as such, claim 12 is not obvious in view of the same.

Examiner disagrees with Appellant. In this case, Bennett et al., Nguyen and Tao et al. all disclose a process to produce a printing plate as discussed above. Further, Tao is only added to disclose resin is a novolak resin. Examiner did not disclose adding Tao to teach a near infrared absorption polymer comprising two different pendent infrared chromophoric moieties covalently bonded to the backbone of alkali-soluble resin. Tao et al. disclose positive working printing plates are well-known in the art (column 1, lines 40-43). Tao et al. explicitly disclose an imageable layer comprising a novolak resin (column 5, lines 36-52), which is a thermoplastic commonly used in lithography.

11. Related Proceeding(s) Appendix

None.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Chanceity N Robinson/
Examiner, Art Unit 1722

/Cynthia H Kelly/

Supervisory Patent Examiner, Art Unit 1722

Conferees:

Application/Control Number: 10/599,657

Page 21

Art Unit: 1722

/Cynthia H Kelly/

Supervisory Patent Examiner, Art Unit 1722

/David A. Simmons/

Quality Assurance Specialist, Tech Center 1700